

=> FILE REG

FILE 'REGISTRY' ENTERED AT 15:13:28 ON 28 AUG 2003
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provided by InfoChem.

STRUCTURE FILE UPDATES: 26 AUG 2003 HIGHEST PN 573925-63-0
DICTIONARY FILE UPDATES: 26 AUG 2003 HIGHEST PN 573925-63-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 15:13:33 ON 28 AUG 2003
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FILE COVERS 1907 - 28 Aug 2003 VOL 139 ISS 9
FILE LAST UPDATED: 27 Aug 2003 (20030827/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> D QUE

L4

STR

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      @11      2      8
      C      C      NH G1
10 C      C @12  1 C      C      9
      G2      C @13  6 C      5 C 4
      14

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NH2 7

VAR G1=13/12/11

VAR G2=N/C

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

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L6      536 SEA FILE=REGISTRY SSS FUL L4
L7      556 SEA FILE=HCAPLUS ABB=ON L6
L8      86 SEA FILE=HCAPLUS ABB=ON L7 AND (HAIR OR KERAT?)
L9      9 SEA FILE=HCAPLUS ABB=ON L8 AND ?PYRAZOL?
L11     362438 SEA FILE=REGISTRY ABB=ON 16.165/RID
L12     204674 SEA FILE=REGISTRY ABB=ON L11 AND 1-3/NR
L13     65041 SEA FILE=HCAPLUS ABB=ON L12
L14     54 SEA FILE=HCAPLUS ABB=ON L8 AND L13
L15     50960 SEA FILE=REGISTRY ABB=ON L12 AND 4/N
L16     16523 SEA FILE=HCAPLUS ABB=ON L15
L17     5 SEA FILE=HCAPLUS ABB=ON L8 AND L16
L18     1 SEA FILE=HCAPLUS ABB=ON L14 AND INTERMED?
L20     13 SEA FILE=HCAPLUS ABB=ON L9 OR L17 OR L18

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=> D L20 ALL 1-13 HITSTR

L20 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:357117 HCAPLUS

DN 138:373806

TI **Hair** dye composition containing amino silicone

IN Legrand, Frederic; Millequant, Jean Marie

PA L'Oreal, Fr.

SO Fr. Demande, 47 pp.

CODEN: FRMXBL

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | FR 2831808 | A1 | 20030509 | FR 2001-14469 | 20011108 |
| | EP 1312343 | A2 | 20030521 | EP 2002-292666 | 20021025 |
| | EP 1312343 | A3 | 20030716 | | |

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

F: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

| | | | | |
|---------------|----|----------|----------------|----------|
| CN 1416798 | A | 20030514 | CN 2002-149984 | 20021107 |
| JP 2003206220 | A2 | 20030722 | JP 2002-326185 | 20021108 |
| US 2003152534 | A1 | 20030814 | US 2002-290345 | 20021108 |

PRAI FR 2001-14469 A 20011108

OS MARPAT 138:373806

AB The invention relates to a compn. of dyeing for human **keratin** (e.g., **hair**) fibers, with the compn. comprising at least a direct dye or an oxidative dye, and a silicone amino aminoethyliminoalkyl (C4-C8). The invention also relates to the processes and devices of dyeing implementing the compn. Thus, a **hair** dye compn. contained Basic Blue 99 0.1, Dow Corning 2-8299 2, EtOH 20, Jaguar HP 60 1, Oramix CG 110 8, 2-amino-2-methyl-1-propanol qs and water qs to 100 g.

ST **hair** dye amino silicone

IT Phenols, biological studies
PL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(amino; **hair** dye compn. contg. amino silicone)

IT Polysiloxanes, biological studies
PL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(aminoalkyl; **hair** dye compn. contg. amino silicone)

IT Surfactants
(cationic; **hair** dye compn. contg. amino silicone)

IT Azo dyes
Dyes
(direct; **hair** dye compn. contg. amino silicone)

IT **Hair** preparations
(dyes, oxidative; **hair** dye compn. contg. amino silicone)

IT **Hair** preparations
(dyes; **hair** dye compn. contg. amino silicone)

IT Azo dyes
Human
Molecular weight distribution
Particle size distribution
Surfactants
Viscosity
(**hair** dye compn. contg. amino silicone)

IT Bisphenols
Bromates
PL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(**hair** dye compn. contg. amino silicone)

IT Surfactants
(nonionic; **hair** dye compn. contg. amino silicone)

IT Amines, biological studies
PL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(phenolic; **hair** dye compn. contg. amino silicone)

IT 9016-00-6, Poly[oxy(dimethylsilylene)]
PL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(Dow Corning 2-8299; **hair** dye compn. contg. amino silicone)

IT 84-65-1D, Anthraquinone, derivs. 95-54-5D, o-Phenylenediamine, derivs.
95-55-6D, o-Aminophenol, derivs. 106-50-3, p-Phenylenediamine,
biological studies 106-50-3D, p-Phenylenediamine, derivs. 108-45-2D,
m-Phenylenediamine, derivs. 110-86-1D, Pyridine, derivs. 123-30-8D,
p-Aminophenol, derivs. 124-43-6 298-13-1D, **Pyrazole**, derivs.
289-95-2D, Pyrimidine, derivs. 591-27-5D, m-Aminophenol, derivs.
2835-95-2, 2-Methyl-5-aminophenol 7722-84-1, Hydrogen peroxide,
biological studies **68123-13-7**, Basic Blue 99
PL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dye compn. contg. amino silicone)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Bergmann, W; US 5077040 A 1991 HCAPLUS
 (2) Bristol Myers Co; GB 2141454 A 1984 HCAPLUS
 (3) Kag Corp; EP 0890355 A 1999 HCAPLUS
 (4) Oreal; EP 0974335 A 2000 HCAPLUS

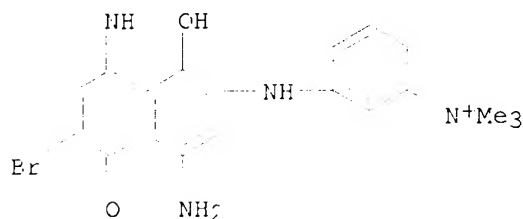
IT 68123-13-7, Basic Blue 99

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dye compn. contg. amino silicone)

FN 68123-13-7 HCAPLUS

CN Benzenaminium, 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

L20 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:357116 HCAPLUS

IN 138:373805

TI Hair dye compositions containing an amino silicone

IN Legrand, Frederic; Millequant, Jean Marie

PA L'Oreal, Fr.

SO Fr. Demande, 52 pp.

CODEN: FRXXBL

PT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI | FR 2831807 | A1 | 20030509 | FR 2001-14467 | 20011108 |
| | EP 1312344 | A2 | 20030521 | EP 2002-292743 | 20021104 |
| | EP 1312344 | A3 | 20030730 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| | JP 2003160456 | A2 | 20030603 | JP 2002-326175 | 20021108 |
| | US 2003140429 | A1 | 20030731 | US 2002-290358 | 20021108 |
| PRAI | FR 2001-14467 | A | 20011108 | | |

OS MARPAT 138:373805

AB The invention relates to a compn. of dyeing for human hair fibers, with the compn. comprising at least a direct dye or an oxidn. dye, and an amino silicone. The invention also relates to the processes and devices of dyeing implementing the aforementioned compn. Thus, a

hair dye compn. contained SLM-28020 (siloxane) 2, basic Blue-99
S.1, EtOH 20, Jaguar HF-60 1, Oramix CG110 8, 2-amino-2-methyl-1-propanol
qs 7.5, and water qs to 100 g.

ST hair dye amino silicone

IT Polysiloxanes, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(3-[(2-aminoethyl)amino]propyl Me, di-Me, SLM 28020; hair dye
compns. contg. amino silicone)

IT Polysiloxanes, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
([(aminoethyl)amino]propyl, di-Me, Belsil ADM 652; hair dye
compns. contg. amino silicone)

IT Polysiloxanes, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(amino; hair dye compns. contg. amino silicone)

IT Surfactants
(cationic; hair dye compns. contg. amino silicone)

IT Azo dyes
(direct; hair dye compns. contg. amino silicone)

IT Hair preparations
(dyes, oxidative; hair dye compns. contg. amino silicone)

IT Hair preparations
(dyes; hair dye compns. contg. amino silicone)

IT Azo dyes
Human
Molecular weight distribution
Oxidizing agents
Particle size distribution
Surfactants
(hair dye compns. contg. amino silicone)

IT Bisphenols
Bromates
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dye compns. contg. amino silicone)

IT Surfactants
(nonionic; hair dye compns. contg. amino silicone)

IT 84-65-1D, AnthraQuinone, derivs. 95-54-5D, o-Phenylenediamine, derivs.
95-55-6, o-Aminophenol 106-50-3D, p-Phenylenediamine, derivs.
106-51-4D, Quinone, derivs. 108-45-2D, m-Phenylenediamine, derivs.
110-86-1D, Pyridine, derivs. 123-30-8, p-Aminophenol 124-43-6
288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine, derivs.
591-27-5D, m-Aminophenol, derivs. 2835-95-2, 2-Methyl-5-aminophenol
7722-84-1, Hydrogen peroxide, biological studies **68123-13-7**,
Basic Blue 99
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dye compns. contg. amino silicone)

PE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

FE

(1) Henkel Kgaa; DE 19754053 A 1999 HCAPLUS

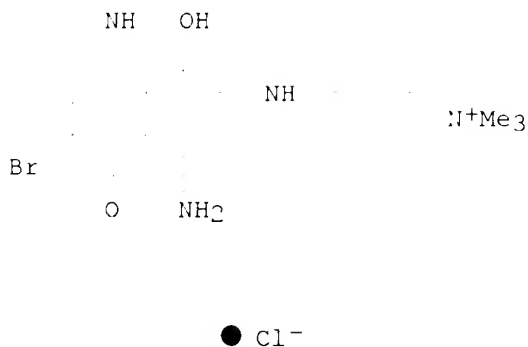
(2) Kao Corp; EP 0890355 A 1999 HCAPLUS

(3) Oreal; GB 2165550 A 1986 HCAPLUS

IT **68123-13-7**, Basic Blue 99
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dye compns. contg. amino silicone)

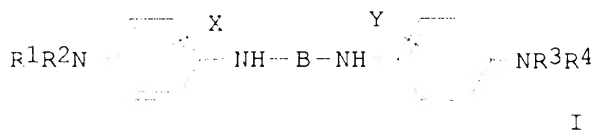
FN 68123-13-7 HCAPLUS

CN Benzenaminium, 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



L20 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2003:242288 HCAPLUS
 DN 138:254945
 TI Preparation of bridged p-phenylenediamines for use as developer components
 in oxidation dyes
 IN Knuebel, Georg; Rose, David; Meinigke, Bernd; Hoeffkes, Horst; Giesa,
 Helmut
 PA Henkel Kommanditgesellschaft auf Aktien, Germany
 SO PCT Int. Appl., 43 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 IC ICM C07C217-76
 ICS A61K007-13
 CC 25-4 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 41, 62
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 2003024917 | A1 | 20030327 | WO 2002-EP9875 | 20020904 |
| W: AU, BR, CA, CN, CZ, HU, JP, NO, PL, RU, SK, US, VN RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR DE 10144226 A1 20030327 DE 2001-10144226 20010907 PRAI DE 2001-10144226 A 20010907 OS CASREACT 138:254945; MARPAT 138:254945 GI | | | | |



AB The present invention relates to novel bridged p-phenylenediamines, the
 use thereof as developer components in oxidn. dyes as well as novel oxidn.
 dyes, which contain the aforementioned bridged p-phenylenediamines. Said
 invention also relates to a method for producing said bridged
 p-phenylenediamines as their acid addn. salts. Within the frame of said

invention, it was discovered that polyoxyalkyl-bridged p-phenylenediamines I [B = polyoxyalkyl-bridge (with at least 2 O); X, Y = H, Cl, F, Cl-4-alkyl, hydroxyalkyl, aminolalkyl, alkoxy, C2-4-dihydroxyalkyl, Cl-4-monohydroxyalkyl, C2-4-alkenyl; R1, R2, R3, R4 = H, Cl-4-alkyl, C2-4-dihydroxyalkyl, Cl-4-monohydroxyalkyl] are extremely well-suited for use as developer components in oxidn. dyes. Thus, I [R1 = R2 = X = Y = H, B = CH2(CH2OCH2)2CH2].cntdot.4HCl was prepd. from 2,2'-(ethylenedioxy)diethylamine via condensation with 4-FC6H4NO2, followed by hydrogenolysis. The color of dyes contg. I [R1 = R2 = X = Y = H, B = CH2(CH2OCH2)2CH2].cntdot.4HCl with various coupling agents was detd. [dark blue with 1,3-bis(2,4-diaminophenoxy)propane tetrahydrochloride; bamboo yellow with 2,7-dihydroxynaphthalene].

ST phenylenediamine bridged prepn developer oxidn dye

IT Cosmetics

{cosmetic dyes; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes}

IT Dyes

{cosmetic; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes}

IT Amines, reactions

RL: RCT (Reactant); FACT (Reactant or reagent)

{diamines, polyoxyalkyl, condensation of, with 1-fluoro-4-nitrobenzene; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes}

IT Hair preparations

{dyes, oxidative; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes}

IT Fibers

RL: NUU (Other use, unclassified); USES (Uses)

{keratin, oxidn. dye for; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes}

IT Dyes

{oxidative, developers; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes}

IT Cosmetics

{oxidn. dyes for; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes}

IT 95-70-5, p-Toluenediamine 123-30-8, p-Aminophenol 1004-74-6, Pyrimidinetetramine 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 2835-99-6, 4-Amino-3-methylphenol 3240-72-0, 2,4-Dihydroxy-5,6-diaminopyrimidine 7575-35-1, N,N-Bis(2-hydroxyethyl)-p-phenylenediamine 22715-34-0, 2-Hydroxy-4,5,6-triaminopyrimidine 51387-92-9, 4-Amino-2-[(diethylamino)methyl]phenol 79352-72-0, 2-(Aminomethyl)-4-aminophenol 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 126335-43-1, 2-(2,5-Diaminophenoxy)ethanol 128729-30-6, 1,3-[N,N'-Bis(2-hydroxyethyl)-N,N'-bis(4-aminophenyl)diamino]-2-propanol 155601-17-5, 4,5-Diamino-1-(2-hydroxyethyl)pyrazole 503033-69-0, Bis(2-hydroxy-5-aminophenyl)amine

FL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

{co-developer in oxidn. dye contg. bridged p-phenylenediamines; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes}

IT 929-59-9, 2,2'-(Ethylenedioxy)diethylamine 4246-51-9, 4,7,10-Trioxa-1,13-tridecanamine 7300-34-7, 1,4-Bis(3-aminopropoxy)butane

FL: FCT (Reactant); FACT (Reactant or reagent)

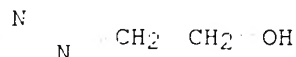
{condensation of, with 1-fluoro-4-nitrobenzene; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes}

- IT 350-46-9, 1-Fluoro-4-nitrobenzene
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with polyoxyalkylenediamines; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes)
- IT 67-68-5, DMSO, uses
RL: NUU (Other use, unclassified); USES (Uses)
(condensation solvent for; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes)
- IT 83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 90-15-3, 1-Naphthol 95-88-5, 4-Chlororesorcinol 108-45-2, m-Phenylenediamine, biological studies 108-45-2D, m-Phenylenediamine, derivs. 108-46-3, Resorcinol, biological studies 108-46-3D, Resorcinol, derivs. 120-83-2, 2,4-Dichlorophenol 150-19-6, Resorcinol monomethyl ether 504-15-4, 5-Methylresorcinol 575-38-2, 1,7-Dihydroxynaphthalene 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, m-Aminophenol 591-27-5D, m-Aminophenol, derivs. 608-25-3, 2-Methylresorcinol 1321-67-1, Naphthol 2835-95-2, 5-Amino-2-methylphenol 6201-65-6, 2-Chlororesorcinol 16867-03-1, 2-Amino-3-hydroxypyridine 39455-90-9, **Pyrazolone** 55302-96-0, 5-[(beta.-Hydroxyethyl)amino]-2-methylphenol 81892-72-0, 1,3-Bis(2,4-diaminophenoxy)propane 84540-50-1, 3-Amino-2-chloro-6-methylphenol 110102-86-8, 5-Amino-4-chloro-2-methylphenol 115423-85-3, 3,5-Diamino-2-methoxytoluene
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(coupling agent for oxidn. dye contg. bridged p-phenylenediamines; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes)
- IT 66422-95-5, 2-(2,4-Diaminophenoxy)ethanol dihydrochloride 74918-21-1, 1,3-Bis(2,4-diaminophenoxy)propane tetrahydrochloride 83732-72-3, 3-Amino-6-methoxy-2-(methylamino)pyridine dihydrochloride
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(coupling agent in oxidn. dye contg. bridged p-phenylenediamines; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes)
- IT 162885-13-4P, 1,13-Bis[(4-nitrophenyl)amino]-4,7,10-trioxatridecane 503033-67-8P, 1,8-Bis[(4-nitrophenyl)amino]-3,6-dioxaoctane 503033-68-9P, 1,12-Bis[(4-nitrophenyl)amino]-4,9-dioxadodecane
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and hydrogenolysis of; prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes)
- IT 106-50-3DP, p-Phenylenediamine, polyoxyalkyl-bridged 503033-64-5P, 1,8-Bis[(4-aminophenyl)amino]-3,6-dioxaoctane tetrahydrochloride 503033-65-6P, 1,12-Bis[(4-aminophenyl)amino]-4,9-dioxadodecane tetrahydrochloride 503033-66-7P, 1,13-Bis[(4-aminophenyl)amino]-4,7,10-trioxatridecane tetrahydrochloride
RL: COS (Cosmetic use); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of bridged p-phenylenediamines for use as developer components in oxidn. dyes)
- RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Basf A -G; EP 0433887 A 1991 HCAPLUS
(2) Pugh, C; MACROMOLECULES 1997, V30(26), P8139 HCAPLUS
- IT 155601-17-5, 4,5-Diamino-1-(2-hydroxyethyl)**pyrazole** 503033-69-0, Bis(2-hydroxy-5-aminophenyl)amine
PL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(co-developer in oxidn. dye contg. bridged p-phenylenediamines; prepn.

of bridged p-phenylenediamines for use as developer components in oxidn. dyes)

RN 155601-17-5 HCAPLUS

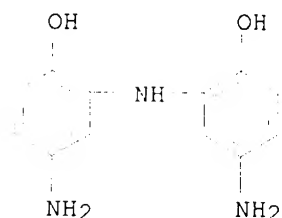
CN 1H-Pyrazole-1-ethanol, 4,5-diamino- (9CI) (CA INDEX NAME)



H₂N NH₂

RN 503033-69-0 HCAPLUS

CN Phenol, 2,2'-iminobis[4-amino- (9CI) (CA INDEX NAME)



L20 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:714094 HCAPLUS

DN 137:252661

TI Oxidative **hair** dyes containing 2,3-diaminophenol derivatives as coupling agents

PA Wella Ag, Germany

SO Ger. Gebrauchsmusterschrift, 42 pp.

CODEN: GGXXFR

DT Patent

LA German

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|------------------|----------|
| PI | DE 20206274 | U1 | 20020919 | DE 2002-20206274 | 20020420 |
| PRAI | DE 2002-20206274 | | 20020420 | | |
| OS | MARPAT 137:252661 | | | | |

AB The invention concerns oxidative **hair** dyes that contain 2,3-diaminophenol derivs. as coupling agents; further the dyes contain developers and direct dyes. Thus 3-amino-2-(2-hydroxyethylamino)phenol dihydrochloride was synthesized and 1.25 mmol of the compd. was used in a **hair** dye compn. that further contained: 1.25 mmol 2,5-diaminotoluene sulfate; 10.0 g lauryl ether sulfate; 9.0 g ammonia (22% soln.); 7.8 g ethanol; 0.3 g ascorbic acid; 0.3 g EDTA disodium salt; water to 100 g.

ST diaminophenol derivate coupler oxidn **hair** dye

IT Dyes

(direct; oxidative **hair** dyes contg. 2,3-diaminophenol derivs.

as coupling agents)

IT **Hair preparations**
(dyes, oxidative; oxidative **hair** dyes contg.
2,3-diaminophenol derivs. as coupling agents)

IT **Coupling agents**
pH
(oxidative **hair** dyes contg. 2,3-diaminophenol derivs. as
coupling agents)

IT 7732-18-5, Water, properties
FL: PFP (Properties)
(casreact)

IT 59642-56-8, 2,3-Diaminophenol
FL: CCS (Cosmetic use); BIOL (Biological study); USES (Uses)
(derivs.; oxidative **hair** dyes contg. 2,3-diaminophenol
derivs. as coupling agents)

IT 89-57-6, 5-Aminosalicylic acid 92-65-9, 4-[Ethyl(2-
hydroxyethyl)amino]aniline 93-05-0, 4-Diethylaminoaniline 95-55-6
95-70-5, 1,4-Diamino-2-methylbenzene 99-98-9, 4-Dimethylaminoaniline
101-54-2, 4-Phenylaminoaniline 106-50-3, 1,4-Diaminobenzene, biological
studies 533-73-3, 1,2,4-Trihydroxybenzene 611-24-5,
2-Methylaminophenol 615-66-7, 2-Chloro-1,4-diaminobenzene 1004-74-6,
2,4,5,6-Tetraaminopyrimidine 1004-75-7, 2,5,6-Triamino-4-(1H)-pyrimidone
1630-11-1, 1,4-Diamino-3,5-diethylbenzene 2359-52-6,
4-[Di(2-hydroxyethyl)amino]-2-methylaniline 2835-98-5,
6-Amino-3-methylphenol 4318-76-7, 2,5-Diaminopyridine 5306-96-7,
1,4-Diamino-2,3-dimethylbenzene 5862-80-6, 4-[(2,3-
Dihydroxypropyl)amino]aniline 6393-01-7, 1,4-Diamino-2,5-dimethylbenzene
7218-02-2, 1,4-Diamino-2,6-dimethylbenzene 7575-35-1,
4-[Di(2-hydroxyethyl)amino]aniline 17672-22-9, 6-Amino-2-methylphenol
45514-38-3, 4,5-Diamino-1-methyl-1H-pyrazole
53981-24-1 53981-25-2 66566-48-1, 4-[(2-Methoxyethyl)amino]aniline
67199-87-5, 1,4-Diamino-2-aminomethylbenzene 73793-80-3,
1,4-Diamino-2-hydroxymethylbenzene 87700-93-4 93841-24-8,
1,4-Diamino-2-(2-hydroxyethyl)benzene 97902-52-8, 1,4-Diamino-2-(1-
methylethyl)benzene 104333-08-6, 4-Amino-2-(2-hydroxyethyl)phenol
104752-48-9, 4-[(3-Hydroxypropyl)amino]aniline 105293-89-8,
4-Dipropylaminoaniline 109942-17-8, 2,5-Diaminobiphenyl 114484-31-0
122196-12-7 126335-43-1, 1,4-Diamino-2-(2-hydroxyethoxy)benzene
155601-16-4, 4,5-Diamino-1-(1-methylethyl)-1H-pyrazole
155601-17-5, 4,5-Diamino-1-(2-hydroxyethyl)-1H-pyrazole
157469-54-0, 4,5-Diamino-1-[(4-methylphenyl)methyl]-1H-
pyrazole **157469-55-1**, 1-[(4-Chlorophenyl)methyl]-4,5-
diamino-1H-pyrazole 159661-45-7, 1,8-Bis(2,5-diaminophenoxy)-
3,6-dioxaoctane 207568-58-9, 2-[2-(Acetylamino)ethoxy]-1,4-
diaminobenzene 244104-61-8 246244-41-7 306959-12-6 329320-36-7,
1,4-Diamino-2-(1-hydroxyethyl)benzene 337906-36-2, 1,4-Diamino-2-
methoxymethylbenzene 460049-84-7 460049-85-8 460049-87-0
460049-88-1 **460049-89-2** 460049-90-5 460049-92-7
460049-94-9 460049-96-1 460049-98-3 460050-00-4 460050-02-6
460050-04-8 460050-08-2 460050-09-3 460050-10-6 460050-11-7
460050-12-8
FL: CCS (Cosmetic use); BIOL (Biological study); USES (Uses)
(oxidative **hair** dyes contg. 2,3-diaminophenol derivs. as
coupling agents)

IT 460050-15-1P 460050-16-2P 460050-17-3P 460050-18-4P 460050-19-5P
460050-20-8P 460050-21-9P 460050-22-0P 460050-23-1P 460050-25-3P
460050-27-5P 460050-28-6P 460050-29-7P **460050-30-0P**
RL: CCS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological

study); PREP (Preparation); USES (Uses)

(oxidative **hair** dyes contg. 2,3-diaminophenol derivs. as coupling agents)

IT 109-85-3, 2-Methoxyethylamine 110-91-8, Morpholine, reactions
123-75-1, Pyrrolidine, reactions 141-43-5, 2-Ethanolamine, reactions
556-53-6, n-Propylamine hydrochloride 557-66-4, Ethylamine hydrochloride
616-30-3, 3-Amino-1,2-propanediol 929-06-6, 2-(2-Hydroxyethoxy)-
ethylamine 5382-16-1, 4-Piperidinol 57260-73-8 62848-20-8,
3-Methoxypyrrolidine 68521-88-5 71026-66-9 101935-40-4,
2-Bromo-3-nitrophenol 460050-14-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(oxidative **hair** dyes contg. 2,3-diaminophenol derivs. as coupling agents)

IT 460050-13-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(oxidative **hair** dyes contg. 2,3-diaminophenol derivs. as coupling agents)

IT 45514-38-3, 4,5-Diamino-1-methyl-1H-pyrazole
155601-16-4, 4,5-Diamino-1-(1-methylethyl)-1H-pyrazole
155601-17-5, 4,5-Diamino-1-(2-hydroxyethyl)-1H-pyrazole
157469-54-0, 4,5-Diamino-1-[(4-methylphenyl)methyl]-1H-pyrazole
157469-55-1, 1-[(4-Chlorophenyl)methyl]-4,5-diamino-1H-pyrazole 460049-89-2

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(oxidative **hair** dyes contg. 2,3-diaminophenol derivs. as coupling agents)

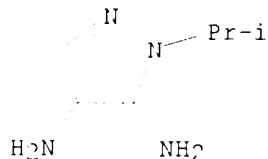
RN 45514-38-3 HCAPLUS

CN 1H-Pyrazole-4,5-diamine, 1-methyl- (9CI) (CA INDEX NAME)



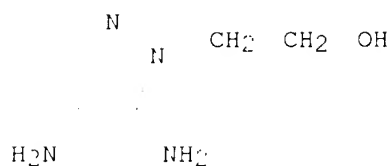
RN 155601-16-4 HCAPLUS

CN 1H-Pyrazole-4,5-diamine, 1-(1-methylethyl)- (9CI) (CA INDEX NAME)



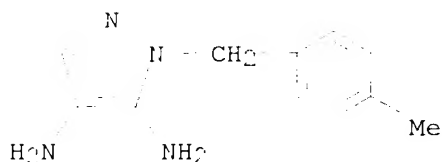
RN 155601-17-5 HCAPLUS

CN 1H-Pyrazole-1-ethanol, 4,5-diamino- (9CI) (CA INDEX NAME)



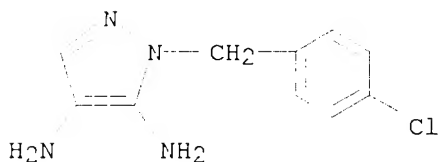
RN 157469-54-0 HCAPLUS

CN 1H-Pyrazole-4,5-diamine, 1-[(4-methylphenyl)methyl]- (9CI) (CA INDEX NAME)



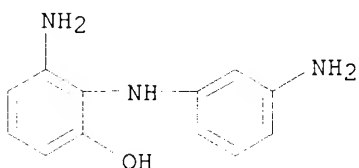
RN 157469-55-1 HCAPLUS

CN 1H-Pyrazole-4,5-diamine, 1-[(4-chlorophenyl)methyl]- (9CI) (CA INDEX NAME)



RN 460049-89-2 HCAPLUS

CN Phenol, 3-amino-2-[(3-aminophenyl)amino]- (9CI) (CA INDEX NAME)



IT 460050-30-0P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(oxidative hair dyes contg. 2,3-diaminophenol derivs. as coupling agents)

RN 460050-30-0 HCAPLUS

CN Phenol, 3-amino-2-[(3-aminophenyl)amino]-, trihydrochloride (9CI) (CA INDEX NAME)

NH₂NH₂

NH

OH

● 3 HCl

L20 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2001:833034 HCAPLUS
 DN 135:376486
 TI Cosmetic conditioning compositions containing a fatty alcohol or fatty acid and a quaternary ammonium compound
 IN Pascual, Fe; Newell, Gerald Patrick; Sun, Wei-Mei; Vasudevan, Tirucheral Varahan
 PA Unilever PLC, UK; Unilever N.V.; Hindustan Lever Limited
 SO PCT Int. Appl., 32 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K007-06
 CC 62-1 (Essential Oils and Cosmetics)
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI | WO 2001085108 | A2 | 20011115 | WO 2001-EP4879 | 20010501 |
| | WO 2001085108 | A3 | 20020718 | | |
| | W: | | | | |
| | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: | | | | |
| | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | EF 1280497 | A2 | 20030205 | EP 2001-945068 | 20010501 |
| | R: | | | | |
| | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | BR 2001010660 | A | 20030211 | BR 2001-10660 | 20010501 |
| | US 2002019685 | A1 | 20020207 | US 2001-854400 | 20010511 |
| PFAI | US 2000-204055P | P | 20000512 | | |
| | WO 2001-EP4879 | W | 20010501 | | |
| AB | A rinse-off water-in-oil-in-water (W1/O/W2) multiple emulsion compn. is described comprising: (1) about 5-99% by wt. of an external aq. phase comprising water and a liq. cryst. conditioning agent, such as a fatty alc. or fatty acid, and a quaternary ammonium compd., wherein at least one of the fatty alc., fatty acid or quaternary ammonium compd. contains an unsatd. hydrocarbon chain; (2) about 1-95% by wt. of a primary water-in-oil (W1/O) emulsion contg. a water sol. benefit agent; (3) about 0.5-95% by wt. of the primary emulsion of an oil phase comprising a volatile silicone or volatile hydrocarbon compd.; and (4) about 0.1-20% by | | | | |

wt. of the primary emulsion of a surfactant phase comprising an oil-sol. silicone-based or silicone-free surfactant. The compn. further comprises a water sol. benefit agent, i.e., a skin benefit agent and a **hair** benefit agent, such as a **hair** styling polymer and a **hair** colorant. For example, a color conditioning compn. was prepd. contg. (by wt.) stearamidopropyl amine 0.75%, PEG-2 oleammonium chloride 1.34%, behentrimonium methosulfate 0.25%, cetyl alc. 3.0%, stearyl alc. 2.0%, cetearyl alc. 0.75%, disodium EDTA 0.10%, and water to 100%. Color intensity difference (.DELTA.E) between the untreated and the color conditioner treated Yak **hair** was 15 and 38, resp., due to the presence of PEG-2 oleammonium chloride and behentrimonium methosulfate. The great increase in color intensity difference, which was brought about by an increase in color deposition was, therefore, caused by the presence of the quaternary ammonium surfactant PEG-2 oleammonium chloride or behentrimonium methosulfate or both.

- ST fatty acid alc quaternary ammonium cosmetic conditioner; **hair**
conditioner fatty acid alc quaternary ammonium
- IT Alcohols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(C16-18; cosmetic conditioning compns. contg. fatty alc. or fatty acid
and quaternary ammonium compd.)
- IT Alcohols, biological studies
Fatty acids, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(C8-22; cosmetic conditioning compns. contg. fatty alc. or fatty acid
and quaternary ammonium compd.)
- IT Surfactants
(cationic; cosmetic conditioning compns. contg. fatty alc. or fatty
acid and quaternary ammonium compd.)
- IT **Hair** preparations
(conditioners, styling; cosmetic conditioning compns. contg. fatty alc.
or fatty acid and quaternary ammonium compd.)
- IT Cosmetics
Hair preparations
(conditioners; cosmetic conditioning compns. contg. fatty alc. or fatty
acid and quaternary ammonium compd.)
- IT Surfactants
(cosmetic conditioning compns. contg. fatty alc. or fatty acid and
quaternary ammonium compd.)
- IT Polysiloxanes, biological studies
Quaternary ammonium compounds, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(cosmetic conditioning compns. contg. fatty alc. or fatty acid and
quaternary ammonium compd.)
- IT Liquid crystals
(cosmetic conditioning compns. contg. liq. crystals of fatty alc. or
fatty acid and quaternary ammonium compd.)
- IT Cyclosiloxanes
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(di-Me; cosmetic conditioning compns. contg. fatty alc. or fatty acid
and quaternary ammonium compd.)
- IT Quaternary ammonium compounds, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

- (dimethylditalloy alkyl, chlorides; cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)
- IT **Hair** preparations
(dyes; cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)
- IT Cosmetics
(emulsions; cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)
- IT Polymers, biological studies
PL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**hair** styling; cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)
- IT Hydrocarbons, biological studies
PL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(nonvolatile and volatile; cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)
- IT Polymer blends
PL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(silicone; cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)
- IT 1320-07-6, D & C Brown 1
PL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(D & C Brown 1; cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)
- IT 518-47-8, D & C Yellow 8
PL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(D & C Yellow 8; cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)
- IT 81-48-1, D&C Violet 2
PL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(D&C Violet 2; cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)
- IT 2783-94-0, FD & C Yellow 6
PL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(FD & C Yellow 6; cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)
- IT 77-92-9, Citric acid, biological studies 87-66-1, Pyrogallol 108-46-3, Resorcinol, biological studies 112-02-7, Cetrimonium chloride 112-80-1, Oleic acid, biological studies 112-92-5, Stearyl alcohol 143-28-2 633-96-5, D & C Orange 4 860-22-0, FD&C Blue No. 2 1812-53-9, Dicetyldimonium chloride **1934-21-0**, FD&C Yellow No. 5 2353-45-9, FD&C Green No. 3 3567-66-5, D & C Red No. 33 3844-45-9, FD & C Blue 1 4548-53-2, FD&C Red No. 4 8004-92-0, D&C Yellow No. 10 9004-95-9, Ethoxylated(20) cetyl alcohol 13473-26-2, D&C Red No. 27 16423-68-0, FD&C Red No. 3 17301-53-0, Behentrimonium chloride 17372-87-1, D&C Red No. 22 18472-87-2, D&C Red No. 28 25956-17-6, FD&C Red 40 26381-41-9, Arianor Mahogany 28880-55-9, PEG-2 oleammonium chloride 31692-79-2, Dimethiconol 35567-30-7 36653-82-4, Cetyl alcohol 52387-18-5 **68123-13-7**, Arianor Steel Blue 69391-31-1, Arianor Straw Yellow 81646-13-1 145686-34-6, Cetyl dimethicone copolyol

FL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)

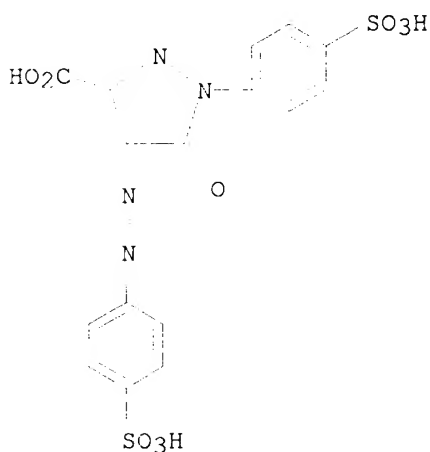
IT 1934-21-0, FD&C Yellow No. 5 68123-13-7, Arianor Steel Blue

FL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cosmetic conditioning compns. contg. fatty alc. or fatty acid and quaternary ammonium compd.)

RN 1934-21-0 HCAPLUS

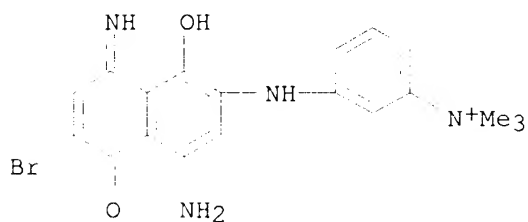
CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfohenyl)-4-[(4-sulfohenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)



● 3 Na

RN 68123-13-7 HCAPLUS

CN Benzenaminium, 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

L20 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

AN 2001:795234 HCAPLUS
 DN 135:348711
 TI Oxidative **hair** dye compositions comprising 1-(4-aminophenyl)-pyrrolidine derivatives and a particular direct dye
 IN Kravtchenko, Sylvain; Lagrange, Alain
 PA L'Oreal, Fr.
 SO Eur. Pat. Appl., 100 pp.
 CODEN: EPXXDW
 DT Patent
 LA French
 IC ICM A61K007-13
 CC 52-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI | EP 1149575 | A1 | 20011031 | EP 2001-400879 | 20010405 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | FR 2807650 | A1 | 20011019 | FR 2000-4991 | 20000418 |
| | FR 2807650 | B1 | 20020524 | | |
| | JP 2001335446 | A2 | 20011204 | JP 2001-120414 | 20010418 |
| | US 2002095732 | A1 | 20020725 | US 2001-836600 | 20010418 |
| | US 2003084516 | A9 | 20030508 | | |
| PRAI | FR 2000-4991 | A | 20000418 | | |
| OS | MARPAT 135:348711 | | | | |
| AB | Oxidative hair dye compns. comprise 1-(4-aminophenyl)-pyrrolidine and a particular direct dye such as nitrobenzene derivs. or quaternary ammonium derivs. A hair dye contained 1-(4-aminophenyl)-pyrrolidine dihydrochloride 0.235, 2,4-diamino-1-(.beta.-hydroxyethyloxy)-benzene dihydrochloride 0.241, Basic Red-51 0.168, excipients and water q.s. 100 g. Equal amt. of the compn. is mixed with 20 vol hydrogen peroxide and applied on the hair for 30 min, the hair is then rinsed, washed with a shampoo, rinsed, and dried. | | | | |
| ST | oxidative hair dye aminophenylpyrrolidine direct dye | | | | |
| IT | Bromates | | | | |
| | RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) | | | | |
| | (alkali metal; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye) | | | | |
| IT | Hair preparations | | | | |
| | (creams; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye) | | | | |
| IT | Dyes | | | | |
| | (direct; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye) | | | | |
| IT | Hair preparations | | | | |
| | (dyes, oxidative; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye) | | | | |
| IT | Alcohols, biological studies | | | | |
| | RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) | | | | |
| | (fatty; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye) | | | | |
| IT | Hair preparations | | | | |
| | (gels; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye) | | | | |
| IT | Phenols, biological studies | | | | |
| | FL: BUU (Biological use, unclassified); BIOL (Biological study); USES | | | | |

(Uses)
 (naphthols; oxidative **hair** dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Salts, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (of peroxy acids; oxidative **hair** dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Solvents
 (org.; oxidative **hair** dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Antioxidants
 Coupling agents
 Opacifiers
 Oxidizing agents
 Preservatives
 Reducing agents
 Sequestering agents
 Sunscreens
 Thickening agents
 (oxidative **hair** dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Acids, biological studies
 Alkali metal hydroxides
 Ceramides
 Paraffin oils
 Peroxysulfates
 Polymers, biological studies
 Polysiloxanes, biological studies
 Vitamins
 Waxes
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative **hair** dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Group IIIA element compounds
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (perborates; oxidative **hair** dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Fats and Glyceridic oils, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (vegetable; oxidative **hair** dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT 89-25-8 90-15-3, .alpha.-Naphthol 95-54-5, o-Phenylenediamine, biological studies 95-55-6, o-Aminophenol 95-70-5 95-88-5 99-56-9 99-57-0 106-50-3, 1,4-Benzenediamine, biological studies 108-26-9 108-45-2, 1,3-Benzenediamine, biological studies 108-45-2D, 1,3-Benzenediamine, derivs. 108-46-3, 1,3-Benzenediol, biological studies 119-34-6 121-88-0 123-30-8, p-Aminophenol 124-43-6 533-31-3, Sesamol 570-24-1 591-27-5 591-27-5D, derivs. 603-85-0 608-25-3 610-81-1 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2784-94-3 2835-95-2 2871-01-4 2973-21-9 4654-16-8, 2,6-Dihydroxy-4-methyl pyridine 4770-37-0, 6-Hydroxyindoline 4926-55-0 5131-58-8 5307-14-2 6358-09-4 6687-56-5 7077-55-6 7267-43-8 7556-37-8 7575-35-1 7687-09-4 7687-11-8 7722-84-1, Hydrogen peroxide, biological studies 9003-99-0, Peroxidase 9055-15-6,

Oxidoreductase 10138-03-2 12270-25-6, Basic Red-51 13556-31-5
 13586-81-7 16867-83-1, 2-Amino-3-hydroxypyridine 21425-62-7
 24455-90-1 24905-87-1 27089-42-8 29705-34-3 30075-29-7
 30569-52-9, 3,6-Dimethylpyrazolo[3,1-c]1,2,4-triazole
 33229-34-4 38866-11-4 39838-87-4 41338-82-3 41338-83-4
 41338-95-8 41338-98-1 41339-00-8 42476-20-0 50610-28-1
 50982-74-6 51138-16-0 51473-40-6 51473-50-8 52132-00-0
 52132-02-2 52132-03-3 52132-04-4 52132-05-5 52132-06-6
 52132-11-3 52132-12-4 52132-13-5 52132-14-6 52132-15-7
 52132-16-8 52132-17-9 52132-18-0 52132-19-1 52132-20-4
 52132-21-5 52132-22-6 52132-23-7 52132-24-8 52132-25-9
 52132-26-0 52132-27-1 52132-28-2 52132-30-6 52132-31-7
 54940-81-7 55302-96-0 56932-44-6 57524-53-5 59405-36-6
 59405-38-8 59405-42-4 59405-44-6 59405-54-8 59405-55-9
 59405-57-1 59405-59-3 59405-61-7 59405-67-3 59405-69-5
 59642-65-8 59642-67-0 59642-69-2 59642-73-8 59642-75-0
 59642-77-2 59642-93-2 59642-95-4 59643-09-3 59643-10-6
 59820-43-8 59820-63-2 62163-15-9 63810-68-4 64651-39-4
 66095-81-6 66422-95-5 66748-37-5 68259-00-7 68912-02-7
 69151-32-2 70643-19-5 73447-48-0 75655-00-4 77061-58-6
 80062-31-3 80498-15-3, Laccase 81608-25-5 81612-54-6 82576-74-7
 82576-75-8 82856-89-1 82856-91-5 82857-00-9 83763-47-7
 83950-26-9 84741-77-5 84912-24-3 85765-48-6 86419-67-2
 86419-73-0 86419-75-2 86419-76-3 89923-52-4 92888-19-2
 92952-81-3 93569-38-1 93569-39-2 93846-05-0 93940-65-9
 97404-02-9 99133-38-7 104226-19-9 104766-44-1 109023-83-8
 109220-25-9 110220-09-2 131657-78-8 141973-33-3 143084-49-5
 160598-04-9 161328-83-2 161328-85-4 161328-86-5 161328-87-6
 161328-89-8 161328-91-2 161328-92-3 161328-94-5 161328-95-6
 161328-96-7 161328-99-0 161329-01-7 161329-02-8 161329-06-2
 161329-07-3 161329-08-4 161329-09-5 161329-15-3 161329-16-4
 161329-17-5 161329-18-6 161329-22-2 161329-23-3 161329-25-5
 161329-27-7 161329-28-8 161329-29-9 161329-30-2 161329-31-3
 161329-35-7 161329-37-9 161329-38-0 161329-39-1 161329-40-4
 161329-42-6 161329-43-7 161329-44-8 161329-45-9 161329-47-1
 161329-49-3 163260-77-3 165672-34-4 167382-76-5 167382-77-6
 167382-78-7 167382-79-8 167382-80-1 167382-82-3 167382-83-4
 167382-87-8 167382-88-9 167382-95-8 167382-96-9 167382-97-0
 167382-98-1 167382-99-2 178822-03-2 178822-05-4 209323-28-4
 211050-61-2 220011-43-8 223577-35-3 223577-36-4 223577-37-5

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. comprising aminophenylpyrrolidine
 derivs. and particular direct dye)

IT 223577-38-6 223577-39-7 223577-40-0 223577-41-1 232284-18-3
 251352-40-6 251352-41-7 251352-42-8 251352-43-9 251352-44-0
 251352-45-1 251352-46-2 251352-47-3 251352-48-4 251352-49-5
 251352-50-8 251352-55-3 259545-90-9 370870-49-8 370871-23-1
 370871-25-3 370871-28-6 370871-30-0 370871-33-3 **370871-35-5**
 370871-37-7 370871-48-0 370872-18-7 370872-71-2

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. comprising aminophenylpyrrolidine
 derivs. and particular direct dye)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

(1) Akram, M; US 5067967 A 1991 HCAPLUS

(2) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(11)

- (3) Bittner Andreas Joachim; WO 9801105 A 1998 HCAPLUS
 (4) Fuji Photo Film Co Ltd; JP 11158048 A 1999 HCAPLUS
 (5) Oreal; EP 0920856 A 1999 HCAPLUS
 (6) Oreal; EP 0970687 A 2000 HCAPLUS
 (7) Plue, A; US 3701769 A 1972 HCAPLUS
 (8) Schwarzkopf Gmbh Hans; DE 19728336 A 1998 HCAPLUS
 (9) Squibb Bristol Myers Co; EP 0891765 A 1999 HCAPLUS
 (10) Squibb Bristol Myers Co; EP 0962452 A 1999 HCAPLUS
 (11) Yuh-Guo, P; US 5876464 A 1999 HCAPLUS

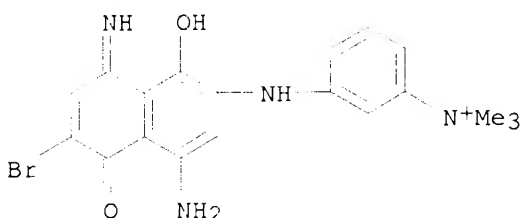
IT 370871-35-5

PL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

RN 370871-35-5 HCAPLUS

CN Benzenaminium, 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethyl- (9CI) (CA INDEX NAME)



L20 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:676561 HCAPLUS

DN 135:246997

TI Oxidation dyeing composition for keratinous fibers with a particular paraphenylenediamine derivative and a particular direct dyeing agent

IN Lang, Gerard

PA L'Oreal, Fr.

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 2001066068 | A1 | 20010913 | WO 2001-FR644 | 20010305 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SE, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| FR 2805741 | A1 | 20010907 | FR 2000-2862 | 20000306 |

EP 1805741 B1 20030620
BF 2001009021 A 20021126 BR 2001-9021 20010305
EP 1263397 A1 20021211 EP 2001-911846 20010305
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRAI FR 2000-2862 A 20000306
WG 2001-FR644 W 20010305
OS MARPAT 135:246997
AB The invention concerns an oxidn. dyeing compn. for **keratinous**
fibers, and in particular human **keratinous** fibers such as
hair comprising, in a medium suitable for dyeing, at least an
oxidn. base selected among certain substituted paraphenylenediamine
derivs. and their addn. salts with an acid, and at least a synthetic
direct dyeing agent selected among the azo, quinoid, triarylmethane,
indamino, azine dyes and/ or a natural dye. The invention also concerns
a dyeing method using said compn. A **hair** dye compn. contained
1-(4'-amino-3'-methylphenyl)-4-hydroxy-2-methyl-pyrrolidine
dihydrochloride 0.837, 2,4-diamino-1-(.beta.-hydroxyethyloxy)-benzene
0.723, Miranol A15 1, and water and excipients q.s. 100 g. Equal amt. of
above compn. is mixed with 20 vol. hydrogen peroxide and applied on the
hair for 30 min, the **hair** is then rinsed, washed with a
shampoo, rinsed and dried to obtain a blue color.
ST oxidative **hair** dye paraphenylenediamine direct dye
IT Bromates
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(alkali metal salts; oxidative **hair** dyes contg.
paraphenylenediamine derivs. direct dyes)
IT Polyelectrolytes
Surfactants
(amphoteric; oxidative **hair** dyes contg. paraphenylenediamine
derivs. direct dyes)
IT Surfactants
(anionic; oxidative **hair** dyes contg. paraphenylenediamine
derivs. direct dyes)
IT Polyelectrolytes
Surfactants
(cationic; oxidative **hair** dyes contg. paraphenylenediamine
derivs. direct dyes)
IT Dyes
(direct; oxidative **hair** dyes contg. paraphenylenediamine
derivs. direct dyes)
IT **Hair** preparations
(dyes, oxidative; oxidative **hair** dyes contg.
paraphenylenediamine derivs. direct dyes)
IT Alcohols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(fatty; oxidative **hair** dyes contg. paraphenylenediamine
derivs. direct dyes)
IT Dyes
(natural; oxidative **hair** dyes contg. paraphenylenediamine
derivs. direct dyes)
IT Surfactants
(nonionic; oxidative **hair** dyes contg. paraphenylenediamine
derivs. direct dyes)
IT Salts, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

Uses)
 (of peroxy acids; oxidative **hair** dyes contg.
 paraphenylenediamine derivs. direct dyes)

IT Solvents
 (org.; oxidative **hair** dyes contg. paraphenylenediamine
 derivs. direct dyes)

IT Antioxidants
 Azo dyes
 Opacifiers
 Oxidizing agents
 Preservatives
 Thickening agents
 (oxidative **hair** dyes contg. paraphenylenediamine derivs.
 direct dyes)

IT Acids, biological studies
 Alkali metal hydroxides
 Ceramides
 Cyclosiloxanes
 Enzymes, biological studies
 Paraffin oils
 Peroxysulfates
 Polysiloxanes, biological studies
 Vitamins
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative **hair** dyes contg. paraphenylenediamine derivs.
 direct dyes)

IT Fats and Glyceridic oils, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (vegetable; oxidative **hair** dyes contg. paraphenylenediamine
 derivs. direct dyes)

IT 72-48-0, Alizarine 81-48-1, solvent violet 13 81-54-9, Purpurin
 82-33-7 83-72-7, Lawsone 85-23-4, Spinulosin 89-25-8 90-15-3,
 .alpha. Naphthol 91-56-5, Isatin 92-31-9, basic blue 17 95-54-5,
 1,2-Benzenediamine, biological studies 95-55-6 95-70-5 95-88-5
 106-50-3, 1,4-Benzenediamine, biological studies 108-26-9 108-45-2,
 1,3-Benzenediamine, biological studies 108-45-2D, 1,3-Benzenediamine,
 derivs. 108-46-3, 1,3-Benzenediol, biological studies 110-86-1D,
 Pyridine, derivs., biological studies 116-85-8, disperse red 15
 123-30-8 124-43-6 128-95-0, disperse violet 1 139-85-5 289-95-2D,
 Pyrimidine, derivs. 458-37-7, Curcumine 477-73-6, basic red 2
 481-39-0, Juglone 533-31-3, Sesamol 533-31-3D, Sesamol, derivs.
 548-62-9, basic violet 3 569-77-7, Purpurogallin 587-98-4, acid yellow
 36 591-27-5, 3-Aminophenol 608-25-3 632-99-5, basic violet 14
 633-03-4, basic green 1 633-96-5, acid orange 7 1151-98-0, Apigenidin
 1220-94-6, disperse violet 4 1260-17-9, Carminic acid 1320-07-6, acid
 orange 24 1694-09-3, acid violet 49 **1934-21-0**, acid yellow 23
 2380-86-1, 1H-Indol-6-ol 2380-94-1, 1H-Indol-4-ol 2390-60-5, basic
 blue 7 2475-45-8, disperse blue 1 2475-46-9, disperse blue 3
 2580-56-5, basic blue 26 2650-18-2, acid blue 9 2706-28-7, acid yellow
 9 2835-95-2, 2-Methyl-5-aminophenol 2872-48-2, disperse red 11
 3179-90-6, disperse blue 7 3486-30-4, acid blue 7 3567-66-6, acid red
 33 4368-56-3, acid blue 62 4430-18-6, acid violet 43 4664-16-8
 4770-37-0 5735-53-5D, Benzomorpholine, derivs. 6441-93-6 7469-77-4
 7556-37-8 7575-35-1 7722-84-1, Hydrogen peroxide, biological studies
 9003-99-0, Peroxidase 9055-15-6, Oxidoreductase 12217-41-3, basic blue
 22 12221-52-2, basic red 22 13556-29-1 18499-92-8, Kermesic acid

20721-50-0, disperse black 9 22036-97-1 22366-99-0 23946-41-0
 26381-41-9, basic brown 16 36118-45-3D, **Pyrazoline**, derivs.
 47569-30-2 52136-23-9 52136-25-1 55302-96-0 66422-95-5
68123-13-7, basic blue 99 68391-30-0, basic red 76 68391-31-1,
 basic yellow 57 68651-46-7, Indigo (dye) 69151-32-2 70643-19-5
 80498-15-3, Laccase 83763-47-7 93841-24-8 99788-75-7 143525-61-5
 143525-64-8 154442-49-6 171662-44-5 171662-53-6 176742-32-8, basic
 brown 17 200346-04-9 200346-06-1 200346-16-3 204700-85-6
 227617-43-8 228268-53-9 228268-59-5 228268-69-7 228268-74-4
 228268-76-6 228268-85-7 228268-87-9 228555-69-9 228555-73-5
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 228569-56-0 342013-25-6 359840-68-9 359840-69-0 359840-70-3
 359840-71-4 359840-72-5 359840-73-6 359840-74-7 **359840-75-8**
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 359841-56-8 359841-57-9 359841-58-0 359841-59-1 359841-60-4
 359841-61-5 359841-62-6 359841-63-7 359841-64-8 359841-65-9
 359841-66-0 359841-67-1 359841-68-2 359841-69-3 359850-56-9
 359868-06-7 360069-60-9, C.I. Disperse Violet 15

PL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative **hair** dyes contg. paraphenylenediamine derivs.
 direct dyes)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Anon; JP 11158048 A 1999 HCAPLUS
- (2) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(11)
- (3) Fuji Photo Film Co Ltd; JP 11158048 A 1999 HCAPLUS
- (4) Henkel Kgaa; DE 19707545 A 1998 HCAPLUS
- (5) Oreal; EP 0673641 A 1995 HCAPLUS
- (6) Schwarzkopf GmbH Hans; DE 19728335 A 1998 HCAPLUS
- (7) Squibb Bristol Myers Co; EP 0962452 A 1999 HCAPLUS

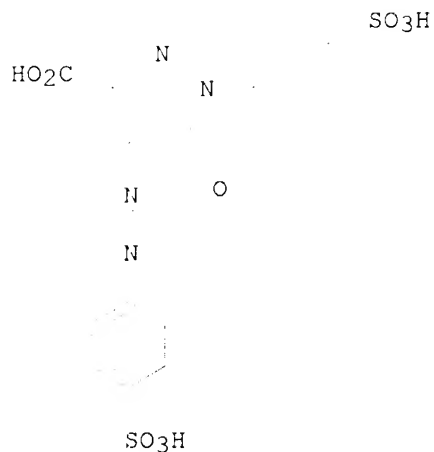
IT **1934-21-0**, acid yellow 23 **68123-13-7**, basic blue 99
359840-75-8

PL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative **hair** dyes contg. paraphenylenediamine derivs.
 direct dyes)

RN 1934-21-0 HCAPLUS

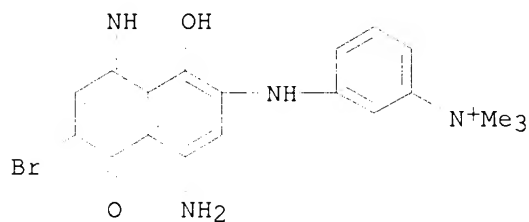
CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-
 sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)



● 3 Na

RN 68123-13-7 HCAPLUS

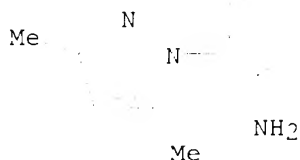
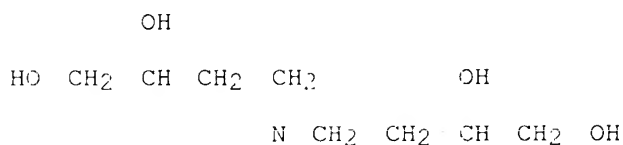
CN Benzenaminium, 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

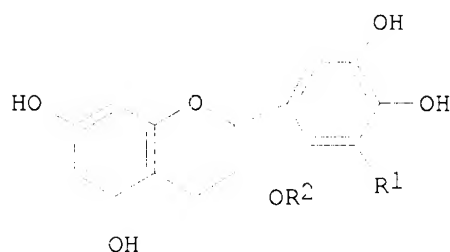
RN 359840-75-8 HCAPLUS

CN 1,2-Butanediol, 4,4'-[[4-amino-3-(3,5-dimethyl-1H-pyrazol-1-yl)phenyl]imino]bis- (9CI) (CA INDEX NAME)



L20 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2000:547325 HCAPLUS
 EN 133:155131
 TI Oxidative **hair** dye composition containing green tea polyphenols
 IN Matravers, Peter; Milius, Ulrich; Cornuelle, Tracy L.
 PA Aveda Corporation, USA
 SO U.S., 5 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM A61K007-13
 NCL 008408000
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| FI | US 6099591 | A | 20000808 | US 1998-15461 | 19980129 |
| PRAI | US 1998-15461 | | 19980129 | | |
| GS | MARPAT 133:155131 | | | | |
| GI | | | | | |



AB A **hair** coloring compn., and a method for using the compn. in which a natural plant-derived chem. of the formula I is employed as a coupler-modifier in a compn. contg. a primary **intermediate** and a customary coupler. The novel coupler-modifiers produce a compn. which is more physiol. suitable for use in **hair** colorings than the prior art compns. and allows for the prepn. of compns. which produce highly stable colorings over a broad range shades and tones. A **hair** coloring soln. contained green tea polyphenols 1.0, p-aminophenol 1.6,

resorcinol 1.6, 50% sodium hydroxide 1.2, anhyd. sodium sulfite 0.4, ammonium lauryl sulfate (28% aq. soln.) 10.0, ethanol 10.0, 26% ammonia 10.0 and water 64.2 g. Shortly before application 10 g of this **hair** coloring compn. is mixed with 10 mL hydrogen peroxide soln. (6%), and the mixt. is allowed to react for 30 min at 30.degree. in blond human **hair**. The **hair** is then rinsed with water and dried to obtain a light olive coloration.

ST oxidative **hair** dye green tea polyphenol

IT Tea products

(beverages, green; oxidative **hair** dye compn. contg. green tea polyphenols)

IT **Hair** preparations

(creams; oxidative **hair** dye compn. contg. green tea polyphenols)

IT **Hair** preparations

(dyes, oxidative; oxidative **hair** dye compn. contg. green tea polyphenols)

IT Coupling agents

(oxidative **hair** dye compn. contg. green tea polyphenols)

IT Phenols, biological studies

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(polyphenols, nonpolymeric; oxidative **hair** dye compn. contg. green tea polyphenols)

IT 95-70-5, 2,5-Diaminotoluene 106-50-3, 1,4-Diaminobenzene, biological studies 116-85-8, DISPERSE RED 15 123-30-8, p-Aminophenol 128-95-0, 1,4-Diamino-anthraquinone. 490-46-0, Epicatechin. 863-03-6, Epicatechin gallate 970-74-1, Epigallocatechin 989-51-5, Epigallocatechin gallate 2475-45-8, 1,4,5,8-Tetraaminoanthraquinone 2835-95-2, 5-Amino-2-methylphenol 2835-99-6, 3-Methyl-4-amino-phenol 5307-14-2, 2-Nitro 1,4-diaminobenzene 7722-84-1, Hydrogen peroxide, biological studies 26381-41-9 **68123-13-7**, C.I. 56059 68391-30-0 **68391-31-1** 73793-80-3, 2,5-Diaminobenzyl alcohol
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative **hair** dye compn. contg. green tea polyphenols)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Anon; EP 124393 1994 HCAPLUS

(2) Anon; JP 09263522 1997 HCAPLUS

(3) Ehara; US 5131912 1992 HCAPLUS

(4) Iwabuchi; US 4517175 1985

(5) Lion Corp; JP 09263522 1997 HCAPLUS

(6) Parent; US 4013404 1977 HCAPLUS

(7) Venkataraman; The Chemistry of Synthetic Dyes 1971, V5, P478

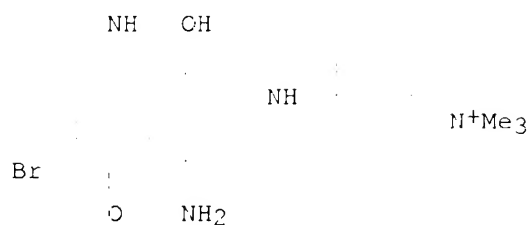
IT **68123-13-7**, C.I. 56059 **68391-31-1**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative **hair** dye compn. contg. green tea polyphenols)

EN **68123-13-7** HCAPLUS

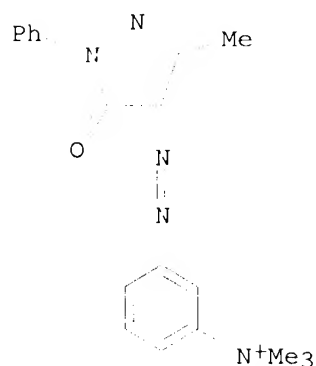
CN Benzenaminium, 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 68391-31-1 HCAPLUS

CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

L20 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2000:314347 HCAPLUS

DN 132:339027

TI **Hair** dye compositions containing a cationic and an oxidative dye based on **pyrazolo**-(1,5-a)pyrimidines

IN Audousset, Marie-Pascale

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 96 pp.

CODEN: EPXXDW

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | EP 998908 | A2 | 20000510 | EP 1999-402549 | 19991015 |
| | EP 998908 | A3 | 20000607 | | |

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

R: AT, BE, CH, DE, DK, ES, FF, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, PG

| | | | | | | |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------------|-------------------|-------------|-----------|
| FF 2785183 | AI | 20000505 | FF 1998-13866 | 19981104 | | |
| FF 2785183 | E1 | 20020405 | | | | |
| AU 9956006 | AI | 20000525 | AU 1999-56006 | 19991021 | | |
| AU 730455 | B2 | 20010308 | | | | |
| MX 9910062 | A | 20000930 | MX 1999-10062 | 19991101 | | |
| CN 1252988 | A | 20000517 | CN 1999-123668 | 19991103 | | |
| KF 2000035201 | A | 20000626 | KF 1999-48337 | 19991103 | | |
| RU 2185811 | C2 | 20020727 | RU 1999-123528 | 19991103 | | |
| JP 2000178147 | A2 | 20000627 | JP 1999-314015 | 19991104 | | |
| BR 9907313 | A | 20001219 | BR 1999-7313 | 19991104 | | |
| PRAI FF 1998-13866 | A | 19981104 | | | | |
| OS MARPAT 132:339027 | | | | | | |
| AB | Hair dye compns. contain a cationic and an oxidative dye based on pyrazolo -(1,5-a)pyrimidines. Thus, a compn. contained pyrazolo -(1,5-a)pyrimidine-3,7-diamine-2HCl 0.333, imidazolium salt 1, EtOH 18, pentasodium diethylenetriaminopentaacetate 1.1, 20% NH3 10.0, and water 100 g. | | | | | |
| ST | pyrazolopyrimidine hair dye oxidative cationic; imidazolium pyrazolopyrimidine hair dye | | | | | |
| IT | Hair preparations (dyes, cationic; hair compns. contg. cationic and oxidative dyes based on pyrazolopyrimidines) | | | | | |
| IT | Hair preparations (dyes, oxidative; hair compns. contg. cationic and oxidative dyes based on pyrazolopyrimidines) | | | | | |
| IT | 965-47-9 | 6687-56-5 | 7077-55-6 | 7267-43-8 | 7687-09-4 | 7687-11-8 |
| | 26381-41-9 | 38866-20-5 | 39838-87-4 | 41338-82-3 | 41338-83-4 | |
| | 41338-95-8 | 41338-98-1 | 41339-00-8 | 42476-20-0 | 46160-00-3 | |
| | 51473-40-6 | 51473-50-8 | 52132-02-2 | 52132-03-3 | 52132-04-4 | |
| | 52132-05-5 | 52132-06-6 | 52132-11-3 | 52132-12-4 | 52132-13-5 | |
| | 52132-14-6 | 52132-15-7 | 52132-16-8 | 52132-17-9 | 52132-18-0 | |
| | 52132-19-1 | 52132-20-4 | 52132-21-5 | 52132-22-6 | 52132-23-7 | |
| | 52132-24-8 | 52132-25-9 | 52132-26-0 | 52132-27-1 | 52132-28-2 | |
| | 52132-30-6 | 52132-31-7 | 54940-81-7 | 59405-36-6 | 59405-44-6 | |
| | 59405-47-9 | 59405-48-0 | 59405-55-9 | 59405-57-1 | 59405-61-7 | |
| | 59405-65-1 | 59642-65-8 | 59642-67-0 | 59642-69-2 | 59642-73-8 | |
| | 59642-75-0 | 59642-77-2 | 59642-93-2 | 59642-95-4 | 59642-97-6 | |
| | 59643-09-3 | 59643-10-6 | 62163-15-9 | 68123-13-7 | 68259-00-7 | |
| | 68391-30-0 | 68391-31-1 | 68391-32-2 | 68912-02-7 | 71134-97-9 | |
| | 72721-05-2 | 73287-60-2 | 73447-48-0 | 75655-00-4 | 77061-58-6 | |
| | 83950-26-9 | 84912-24-3 | 89923-52-4 | 93569-38-1 | 93569-39-2 | |
| | 93940-65-9 | 97404-02-9 | 97406-09-2 | 109220-25-9 | 143084-49-5 | |
| | 160598-04-9 | 161328-83-2 | 161328-85-4 | 161328-86-5 | 161328-87-6 | |
| | 161328-89-8 | 161328-91-2 | 161328-92-3 | 161328-94-5 | 161328-95-6 | |
| | 161328-96-7 | 161329-01-7 | 161329-02-8 | 161329-04-0 | 161329-05-1 | |
| | 161329-06-2 | 161329-07-3 | 161329-08-4 | 161329-09-5 | 161329-15-3 | |
| | 161329-16-4 | 161329-17-5 | 161329-18-6 | 161329-22-2 | 161329-26-6 | |
| | 161329-27-7 | 161329-28-8 | 161329-29-9 | 161329-30-2 | 161329-31-3 | |
| | 161329-35-7 | 161329-37-9 | 161329-38-0 | 161329-39-1 | 161329-40-4 | |
| | 161329-42-6 | 161329-43-7 | 161329-44-8 | 161329-49-3 | 167382-76-5 | |
| | 167382-77-6 | 167382-78-7 | 167382-79-8 | 167382-80-1 | 167382-82-3 | |
| | 167382-83-4 | 167382-87-8 | 167382-88-9 | 167382-95-8 | 167382-96-9 | |
| | 167382-97-0 | 167382-98-1 | 167382-99-2 | 178822-03-2 | 178822-05-4 | |
| | 201599-07-7 | 201599-12-4, | Pyrazolo -(1,5-a)pyrimidine-3,7-diamine | | | |
| | 201599-14-6 | 201599-15-7 | 201599-16-9, | Pyrazolo | | |
| | [1,5-a]pyrimidine-3,5-diamine | 201599-17-9 | 201599-18-0 | 201599-19-1 | | |

201599-20-4 201599-21-5 201599-22-6 201599-23-7 201599-25-9
 201599-26-0 211050-61-2 226940-14-3, Basic orange 69 251352-40-6
 251352-42-8 251352-43-9 251352-44-0 251352-45-1 251352-46-2
 251352-47-3 251352-48-4 251352-49-5 251352-50-8 251352-53-1
 254098-10-7 254450-91-4 267407-69-2 267407-70-5 267407-72-7
 267407-73-8 267407-75-0 267407-76-1 267407-78-3 267407-80-7
 267407-82-9 267407-83-0 267407-84-1 267407-85-2 267407-86-3

RL: BUJ (Biological use, unclassified); BICL (Biological study); USES
 (Uses)

(hair compns. contg. cationic and oxidative dyes based on
pyrazolopyrimidines)

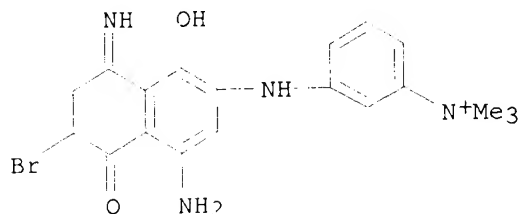
IT 68123-13-7

RL: BUJ (Biological use, unclassified); BICL (Biological study); USES
 (Uses)

(hair compns. contg. cationic and oxidative dyes based on
pyrazolopyrimidines)

RN 68123-13-7 HCAPLUS

CN Benzenaminium, 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

L20 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:282058 HCAPLUS

DN 130:316428

TI Oxidative hair dye comprising a cationic direct dye and an auto-oxidizable dye

IN Lang, Gerard; Audousset, Marie-Pascale

PA L'Oreal, Fr.

SO PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 9920334 | A1 | 19990429 | WO 1998-FR2144 | 19981007 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, ME, NE, SN, TD, TG

AU 9894473 A1 19990519 AU 1998-94473 19981007
AU 730008 B2 20010222
EP 971682 A1 20000119 EP 1998-947622 19981007
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE
BR 9806825 A 20000425 BR 1998-6825 19981007
JP 2000516265 T2 20001205 JP 1999-523336 19981007
RU 2168978 C2 20010620 RU 1999-116255 19981007
US 6503283 B1 20030107 US 1999-331251 19990618
PRAI FR 1997-13242 A 19971022
WO 1998-FR2144 W 19981007
OS MARPAT 130:316428
AB A ready-to-use compn. for dyeing **keratin** fibers, and in particular human **keratin** fibers such as **hair** comprising, in an appropriate dyeing medium, at least a cationic direct dye, and at least an auto-oxidizable dye, and the dyeing method using said compn. is disclosed. A **hair** dye compn. contained 5,6-dihydroxyindoline hydrobromide 0.7, cationic direct Basic Red 76 0.1, water and excipients q.s. 100%. The compn. is applied on the **hair** for 30 min, then washed and dried to obtain a red blond color.
ST oxidative **hair** dye cationic direct dye; hydroxyindoline
oxidative **hair** dye Basic Red
IT Bromates
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
{alkali metal; oxidative **hair** dye comprising cationic direct dye and auto-oxidizable dye}
IT Dyes
{cationic, direct; oxidative **hair** dye comprising cationic direct dye and auto-oxidizable dye}
IT Dyes
{direct, cationic; oxidative **hair** dye comprising cationic direct dye and auto-oxidizable dye}
IT **Hair** preparations
{dyes, oxidative; oxidative **hair** dye comprising cationic direct dye and auto-oxidizable dye}
IT Salts, biological studies
PL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
{of peroxy acids; oxidative **hair** dye comprising cationic direct dye and auto-oxidizable dye}
IT Solvents
{org.; oxidative **hair** dye comprising cationic direct dye and auto-oxidizable dye}
IT Coupling agents
Oxidizing agents
{oxidative **hair** dye comprising cationic direct dye and auto-oxidizable dye}
IT Enzymes, biological studies
Peroxyulfates
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
{oxidative **hair** dye comprising cationic direct dye and auto-oxidizable dye}
IT Group IIIA element compounds
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(perborates; oxidative **hair** dye comprising cationic direct dye and auto-oxidizable dye)

IT 51-17-2D, Benzenediazole, derivs. 69-93-2, Uric acid, biological studies
95-54-5D, 1,2-Benzenediamine, derivs., biological studies 95-55-6D,
derivs. 106-50-3D, 1,4-Benzenediamine, derivs., biological studies
108-45-2D, 1,3-Benzenediamine, derivs., biological studies 110-86-1D,
Pyridine, derivs., biological studies 123-30-8D, derivs. 124-43-6
289-95-2D, Pyrimidine, derivs. 533-31-3D, Sesamol, derivs. 533-73-3,
1,2,4-Trihydroxybenzene 591-27-5D, derivs. 965-47-9 1124-09-0,
1-Methyl-2,4,5-trihydroxybenzene 3131-52-0, 5,6-Dihydroxyindole
4790-08-3 4813-45-0, 3-Methyl-5,6-Dihydroxyindole 4821-00-5,
1-Methyl-5,6-Dihydroxyindole 4821-01-6, 2-Methyl-5,6-Dihydroxyindole
5107-75-5, 2,3-Dimethyl-5,6-Dihydroxyindole 5735-53-5D, Benzomorpholine,
derivs. 6687-56-5 7722-84-1, Hydrogen peroxide (H2O2), biological
studies 9002-12-4, Uricase 9003-99-0, Peroxidase 9055-15-6,
Oxidoreductase 15069-79-1, 5,6-Diacetoxyindole 15872-73-8 26381-41-9
29539-03-5, 5,6-Dihydroxyindoline 36118-45-3D, **Pyrazoline**,
derivs. 38213-78-4 39838-87-4 42476-20-0 54940-81-7 62163-15-9
64651-39-4 **68123-13-7** 68259-00-7 68391-30-0 68391-31-1
68912-02-7 71134-97-9 72584-61-3 73447-48-0 74795-36-1,
5-Methoxy-6-hydroxyindoline 75655-00-4 77061-58-6 83950-26-9
84912-24-3 89532-67-2 89923-52-4 92888-19-2 93940-65-9
97404-02-9 97406-09-2 109220-25-9 113370-02-8, 5-Acetoxy-6-
hydroxyindole 138937-28-7, 5,6-Dihydroxyindoline hydrobromide
139721-20-3 139721-21-4 143084-49-5 160598-04-9 161328-83-2
161328-85-4 161328-86-5 161328-87-6 161328-89-8 161328-91-2
161328-92-3 161328-94-5 161328-95-6 161328-96-7 161329-01-7
161329-02-8 161329-04-0 161329-05-1 161329-06-2 161329-07-3
161329-08-4 161329-09-5 161329-15-3 161329-16-4 161329-17-5
161329-18-6 161329-22-2 161329-23-3 161329-25-5 161329-26-6
161329-27-7 161329-28-8 161329-29-9 161329-30-2 161329-31-3
161329-35-7 161329-37-9 161329-38-0 161329-39-1 161329-40-4
161329-42-6 161329-43-7 161329-44-8 161329-45-9 161329-47-1
161329-49-3 167382-76-5 167382-77-6 167382-78-7 167382-79-8
167382-80-1 167382-82-3 167382-83-4 167382-87-8 167382-88-9
167382-95-8 167382-96-9 167382-97-0 167382-98-1 167382-99-2
178822-05-4 211050-61-2 223569-36-6 223671-96-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative **hair** dye comprising cationic direct dye and
auto-oxidizable dye)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Lang, G; US 3985499 A 1976 HCAPLUS

(2) Lang, G; US 4025301 A 1977 HCAPLUS

IT **68123-13-7**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative **hair** dye comprising cationic direct dye and
auto-oxidizable dye)

RN 68123-13-7 HCAPLUS

CN Benzenaminium, 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

NH OH

NH

N⁺Me₃

Br

O NH₂● Cl⁻

L20 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:244546 HCAPLUS

DN 130:301479

TI Oxidative **hair** dye compositions containing oxidoreductase-type enzymes, oxidation bases, and direct cationic dyes

IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille

PA L'Oreal, Fr.

SO PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI | WO 9917730 | A1 | 19990415 | WO 1998-FR2075 | 19980928 |
| | W: | | | | |
| | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, PO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VH, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: | | | | |
| | GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | FR 2769213 | A1 | 19990409 | FR 1997-12353 | 19971003 |
| | FR 2769213 | B1 | 19991217 | | |
| | AU 9893539 | A1 | 19990427 | AU 1998-93539 | 19980928 |
| | AU 732773 | B2 | 20010426 | | |
| | EP 969798 | A1 | 20000112 | EP 1998-946516 | 19980928 |
| | EP 969798 | B1 | 20030723 | | |
| | R: | | | | |
| | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | BF 9806205 | A | 20000215 | BR 1998-6205 | 19980928 |
| | JP 2000507987 | T2 | 20000627 | JP 1999-521117 | 19980928 |
| | NZ 335513 | A | 20001222 | NZ 1998-335513 | 19980928 |
| | RU 2167646 | C2 | 20010527 | RU 1999-114007 | 19980928 |
| | MX 9904998 | A | 20000228 | MX 1999-4998 | 19990528 |
| | NO 9902646 | A | 19990712 | NO 1999-2646 | 19990601 |
| | US 6228129 | B1 | 20010508 | US 1999-319166 | 19990701 |
| PRAI | FR 1997-12353 | A | 19971003 | | |
| | WO 1998-FR2075 | W | 19980928 | | |

OS MARPAT 130:301479

AB A ready-to-use oxidn. dyeing compn. for **keratin** fibers, and in particular for human **keratin** fibers such as **hair** comprise, in a medium appropriate for dyeing at least an oxidn. base, at least a direct cationic dye, and at least an oxidoreductase-type enzyme with 2 electrons in the presence of at least a donor for said enzyme. A **hair** dye compn. contained para-phenylenediamine 0.7, 2-(4-methylaminophenylazo)-1,3-dimethylimidazolium chloride 0.6, uricase (20 IU/mg) 1.5, uric acid 1.5, excipients and water q.s. 100 g.

ST oxidative **hair** dye oxidoreductase enzyme base; direct cationic dye oxidative **hair** dye

IT Azo dyes
Azo dyes
(cationic; oxidative **hair** dye compns. contg. oxidoreductase-type enzymes, oxidn. bases, and direct cationic dyes)

IT Azo dyes
Azo dyes
(direct, cationic; oxidative **hair** dye compns. contg. oxidoreductase-type enzymes, oxidn. bases, and direct cationic dyes)

IT Azo dyes
(disazo; oxidative **hair** dye compns. contg. oxidoreductase-type enzymes, oxidn. bases, and direct cationic dyes)

IT **Hair** preparations
(dyes, oxidative; oxidative **hair** dye compns. contg. oxidoreductase-type enzymes, oxidn. bases, and direct cationic dyes)

IT Solvents
(org.; oxidative **hair** dye compns. contg. oxidoreductase-type enzymes, oxidn. bases, and direct cationic dyes)

IT Anthraquinone dyes
Oxidizing agents
(oxidative **hair** dye compns. contg. oxidoreductase-type enzymes, oxidn. bases, and direct cationic dyes)

IT Enzymes, biological studies
PL: BJU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxidative **hair** dye compns. contg. oxidoreductase-type enzymes, oxidn. bases, and direct cationic dyes)

IT 69-93-2, Uric acid, biological studies 90-01-7, 2-Hydroxy-methylphenol 92-65-9 93-05-0, N,N-Diethyl p-phenylenediamine 95-55-6, 2-Aminophenol 95-70-5 99-98-9, N,N-Dimethyl p-phenylenediamine 101-54-2, N-(Phenyl) p-phenylenediamine 106-50-3, 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 110-86-1D, Pyridine, derivs., biological studies 123-30-8 148-71-0, 4-Amino-N,N-Diethyl 3-methyl aniline 288-13-1D, **Pyrazole**, derivs. 289-95-2D, Pyrimidine, derivs. 399-95-1, 4-Amino-3-fluorophenol 399-96-2, 4-Amino-2-fluorophenol 537-65-5 591-27-5 591-27-5D, derivs. 615-66-7, 2-Chloro p-phenylenediamine 1630-11-1, 2,6-Diethyl p-phenylenediamine 2359-52-6 2359-53-7 2835-96-3, 4-Amino-2-methylphenol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-methylphenol 5306-96-7, 2,3-Dimethyl p-phenylenediamine 5862-80-6 6393-01-7, 2,5-Dimethyl p-phenylenediamine 6687-56-5 7218-02-2, 2,5-Dimethyl p-phenylenediamine 7575-35-1, N,N-Bis-(.beta.-hydroxyethyl) p-phenylenediamine 9001-37-0, Glucose oxidase 9001-96-1, Pyruvate oxidase 9002-12-4, Uricase 9003-99-0, Peroxidase 9028-72-2, Lactate oxidase 9055-15-6, Oxidoreductase 14791-78-7, 2-Fluoro-p-phenylenediamine 17672-22-9, 2-Amino-6-methylphenol 26381-41-9 29785-47-5, 4-Amino-2-methoxymethylphenol 37250-80-9, Pyranose oxidase 39838-87-4 42476-20-0 54940-81-7

55301-90-00, 5-N-(.beta.-hydroxyethyl)amino-2-methylphenol 62163-15-9
 63969-43-7 64651-39-4 66566-48-1 **68123-13-7** 68259-00-7
 68391-30-0, Basic red 76 68391-31-1 68912-02-7 69669-73-4, Glycerol
 oxidase 71134-97-9 73287-60-2 73447-48-0 73793-80-3,
 3-Hydroxymethyl p-phenylenediamine 75655-00-4 77061-58-6 79352-72-0
 80467-77-2 83950-26-9 84912-24-3 89923-52-4 92888-19-2
 93841-24-8, 2-.beta.-Hydroxyethyl p-phenylenediamine 93940-65-9
 97404-02-9 97406-09-2 97902-52-8, 2-Isopropyl p-phenylenediamine
 105293-89-8, N,N-Dipropyl p-phenylenediamine 105607-68-9 109220-25-9
 110952-46-0 126335-43-1 128729-30-6 128729-31-7 129697-50-3
 130582-53-5 135855-34-4 135855-35-5 143084-49-5 160598-04-9
 161328-83-2 161328-85-4 161328-86-5 161328-87-6 161328-89-8
 161328-91-2 161328-92-3 161328-94-5 161328-95-6 161328-96-7
 161328-99-0 161329-01-7 161329-02-8 161329-05-1 161329-06-2
 161329-07-3 161329-08-4 161329-09-5 161329-15-3 161329-16-4
 161329-17-5 161329-18-6 161329-22-2 161329-23-3 161329-25-5
 161329-26-6 161329-27-7 161329-28-8 161329-29-9 161329-30-2
 161329-31-3 161329-35-7 161329-37-9 161329-38-0 161329-39-1
 161329-40-4 161329-42-6 161329-43-7 161329-44-8 161329-47-1
 161329-49-3 167382-76-5 167382-77-6 167382-78-7 167382-79-8
 167382-80-1 167382-82-3 167382-83-4 167382-87-8 167382-88-9
 167382-95-8 167382-96-9 167382-97-0 167382-98-1 167382-99-2
 168202-61-7 178822-03-2 178822-05-4 207568-58-9 211050-61-2
 221110-58-3 223241-29-0 223241-31-4

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative **hair** dye compns. contg. oxidoreductase-type
 enzymes, oxidn. bases, and direct cationic dyes)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
- (2) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
- (3) Oreal; WO 9400100 A 1994 HCAPLUS

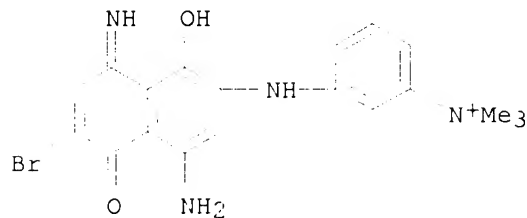
IT **68123-13-7**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative **hair** dye compns. contg. oxidoreductase-type
 enzymes, oxidn. bases, and direct cationic dyes)

RN 68123-13-7 HCAPLUS

CN Benzenaminium, 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

L20 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1997:740966 HCAPLUS

DN 128:39385

TI Direct **hair** dye

IN Kunz, Manuela; Le Gruer, Dominique; Balzer, Wolfgang R.

PA Wella Ag, Germany

SO Ger. Offen., 8 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM D06P001-651

ICS D06P001-39; D06P001-41; D06P003-04; A61K007-13

ICA D06P003-60; D06P003-14; D06P003-24; D06P003-40; C09B029-00; C09B031-00;

C09B033-00; C09B035-00; C09B001-00; C09B003-00; C09B005-00; C09B051-00;

C09B057-00; C07C069-675; C07C069-708

CC 63-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 41

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------------|------|----------|------------------|----------|
| PI | DE 19618595 | A1 | 19971113 | DE 1996-19618595 | 19960509 |
| | EP 806198 | A2 | 19971112 | EP 1997-104473 | 19970315 |
| | EP 806198 | A3 | 20010725 | | |
| | R: DE, ES, FR, GB, IT | | | | |
| | JP 19053970 | A2 | 19980224 | JP 1997-132939 | 19970506 |
| | BR 9703093 | A | 19980908 | BR 1997-3093 | 19970508 |
| PRAI | DE 1996-19618595 | A | 19960509 | | |

OS MARPAT 128:39385

AB Dye compns. for **hair** or other natural or synthetic fibers contain at least one acidic and/or basic direct dye and a hydroxylated carrier mol. which is uncharged at pH 7.0 and has an octanol-water partition coeff. of 0.3-3.0. Suitable carrier mols. include various phenols and .alpha.-hydroxy acid esters. These compns. provide intense, uniform coloration of the **hair** with little or no staining of the skin and are toxicol. safe. Thus, a reddish **hair** dye compn. contained 40% aq. Na coco amphacetate 2.1, glycolic acid 1.3, I-PROH 5.0, 1,2-propanediol 2.0, di-Na EDTA 0.3, vanillin 4.0, Acid Red 14 1.5, and demineralized water 83.8 g.

ST direct **hair** dye hydroxy carrier

IT Carriers

Dyes

(direct **hair** dye)

IT Hydroxy compounds

Phenols, biological studies

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified);

BIOL (Biological study); USES (Uses)

(direct **hair** dye)IT **Hair** preparations(dyes; direct **hair** dye)

IT 90-02-8, Salicylaldehyde, biological studies 98-17-9, 3-Trifluoromethylphenol 99-76-3, Methyl p-hydroxybenzoate 102-29-4, Resorcinol monoacetate 108-29-4, biological studies 121-32-4, Ethylvanillin 121-33-5, Vanillin 122-99-6, 2-Phenoxyethanol 123-08-0, p-Hydroxybenzaldehyde 124-17-9, Acid Blue 1 138-22-7, Butyl lactate 139-85-5, 3,4-Dihydroxybenzaldehyde 150-19-6, Resorcinol monomethyl ether 150-76-5, p-Hydroxyanisole 367-12-4, o-Fluorophenol 371-41-5, p-Fluorophenol 372-20-3, m-Fluorophenol 518-47-8, Acid Yellow 73 533-31-3, 3,4-Methylenedioxyphenol 547-57-9, Acid Orange 6

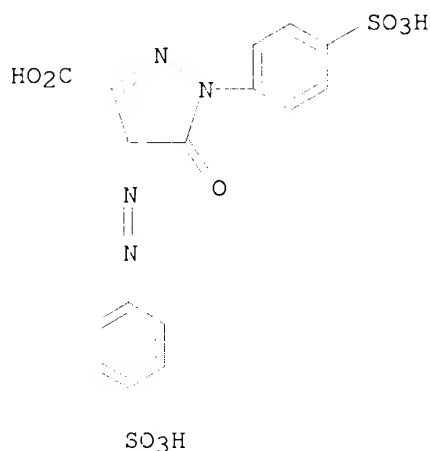
621-59-0, 3-Hydroxy-4-methoxybenzaldehyde 632-99-5, Basic Violet 14
 633-96-5, Acid Orange 7 846-70-8, Acid Yellow 1 860-22-0, Acid Blue 74
 915-67-3, Acid Red 27 1064-48-8, Acid Black 1 1320-07-6, Acid Orange
 14 **1934-21-0**, Acid Yellow 23 2033-89-8, 3,4-Dimethoxyphenol
 2390-60-5, Basic Blue 7 2519-30-4, C.I. 28440 2611-82-7, Acid Red 18
 2650-18-2, Acid Blue 9 3087-16-9, C.I. 44090 3520-42-1 3536-49-0,
 Acid Blue 3 3567-66-6, Acid Red 33 3567-69-9, Acid Red 14 4368-56-3,
 Acid Blue 62 4403-90-1, Acid Green 25 4430-18-6, Acid Violet 43
 4792-78-3 5402-55-1, 2-Thiopheneethanol 5413-75-2, Acid Red 73
 5610-64-0, Acid Black 51 6252-76-2, Acid Violet 9 6373-74-6, Acid
 Orange 3 6373-79-1, Acid Brown 13 6441-93-6, C.I. 18065 7397-62-8,
 Butyl glycolate 8004-92-0, Acid Yellow 3 12220-24-5, Acid Red 195
 16423-68-0, Acid Red 51 17194-82-0, 4-Hydroxyphenylacetamide
 17372-87-1, Acid Red 87 18472-87-2, Acid Red 92 26153-38-8,
 3,5-Dihydroxybenzaldehyde 26381-41-9, Basic Brown 16 33239-19-9, Acid
 Red 95 **68123-13-7**, Basic Blue 99 68391-30-0, Basic Red 76
 176742-32-8, Basic Brown 17

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified);
 BIOL (Biological study); USES (Uses)
 (direct **hair** dye)

IT **1934-21-0**, Acid Yellow 23 **68123-13-7**, Basic Blue 99
 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified);
 BIOL (Biological study); USES (Uses)
 (direct **hair** dye)

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)



● 3 Na

RN 68123-13-7 HCAPLUS

CN Benzenaminium, 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

NH OH

NH

N⁺Me₃

Br

O NH₂● Cl⁻

L20 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1993:524824 HCAPLUS

DN 119:124824

TI **Hair** dye compositions containing direct dyes and polyoxyalkylene modified siloxanes

IN Imamura, Takashi; Murai, Michiko; Shibata, Yutaka

PA Kao Corp., Japan

SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K007-13

ICS A61K007-06

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI | EP 547790 | A1 | 19930623 | EP 1992-310788 | 19921125 |
| | EP 547790 | B1 | 19950823 | | |
| | R: DE, FR, GB | | | | |
| | JP 05221837 | A2 | 19930831 | JP 1992-307191 | 19921117 |
| | JP 2699133 | B2 | 19980119 | | |
| PRAI | JP 1991-335166 | | 19911218 | | |
| OS | MARPAT 119:124824 | | | | |
| AB | A hair dye compn. comprise a direct dye, a polyoxyalkylene modified siloxane contg. 3-30% of a polyoxyalkylene group, and an org. solvent, having a pH=2.0-4.5. A hair dye contained EtOH 20.0, benzyl alc. 3.0, citric acid 2.0, C.I. Acid Black 1 0.01, C.I. Acid Violet 43 0.01, C.I. Acid Red 33 0.03, polyoxyethylene modified siloxane 0.5, hydroxycellulose 1.5% and NaOH q.s. for pH=4.0. | | | | |
| ST | hair dye siloxane polyoxyalkylene solvent; acid dye ethanol siloxane hair prepn | | | | |
| IT | Solvents | | | | |
| | (hair dye compn. contg. polyoxyalkylene siloxane and acid dyes and) | | | | |
| IT | Hair preparations | | | | |
| | (dyes, polyoxyalkylene siloxanes and acid dyes and org. solvents in) | | | | |
| IT | Siloxanes and Silicones, biological studies | | | | |
| | RL: BIOL (Biological study) | | | | |
| | (polyoxyalkylene-, hair dye compn. contg. acid dyes and) | | | | |
| IT | Polyoxyalkylenes, biological studies | | | | |
| | RL: BIOL (Biological study) | | | | |

(siloxane-, hair dye compn. contg. acid dyes and)

IT 633-96-5, C.I. Acid orange 7 846-70-8, C.I. Acid yellow 1 915-67-3,
C.I. Acid red 27 1064-48-8, C.I. Acid black 1 **1934-21-0**, C.I.
Acid yellow 23 2353-45-9, C.I. Food green 3 2611-82-7 2650-18-2,
C.I. Acid blue 9 3520-42-1, C.I. Acid red 52 3567-66-6, C.I. Acid red
33 3844-45-9, C.I. Food blue 2 4403-90-1 4430-18-6, C.I. Acid violet
43 5858-81-1, C.I. Pigment Red 57 27928-00-3 **68123-13-7**
RL: BIOL (Biological study)

(hair dye compn. contg. polyoxyalkylene siloxane and)

IT 56-81-5, 1,2,3-Propanetriol, biological studies 57-55-6,
1,2-Propanediol, biological studies 60-12-8, Phenethyl alcohol
64-17-5, Ethanol, biological studies 67-63-0, 2-Propanol, biological
studies 71-23-8, Propanol, biological studies 71-36-3, Butanol,
biological studies 78-83-1, Isobutanol, biological studies 100-51-6,
Benzenemethanol, biological studies 104-54-1, Cinnamic alcohol
105-13-5 107-21-1, 1,2-Ethanediol, biological studies 107-88-0,
1,3-Butylene glycol 111-77-3, Methyl carbitol 111-90-0, Ethyl carbitol
112-34-5, Butyl carbitol 112-50-5, Triethylene glycol monoethyl ether
122-99-6, Phenoxyethanol 143-22-6 539-18-4, p-Methylbenzyl alcohol
622-08-2, 2-Benzyloxy ethanol 872-50-4, N-Methylpyrrolidone, biological
studies 2568-33-4, Isoprene glycol 2687-94-7, N-Octylpyrrolidone
2687-96-9 6881-94-3, Propyl carbitol
RL: BIOL (Biological study)

(hair dye compn. contg. polyoxyalkylene siloxane and acid
dyes and)

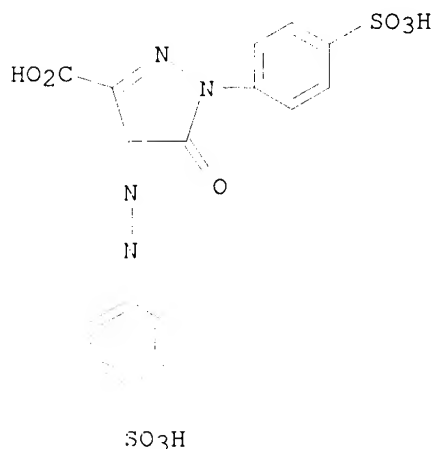
IT **1934-21-0**, C.I. Acid yellow 23 **68123-13-7**

RL: BIOL (Biological study)

(hair dye compn. contg. polyoxyalkylene siloxane and)

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)



● 3 Na

RN 68123-13-7 HCAPLUS

CN Benzenaminium, 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

